

APPENDIX I:

CLAIM AMENDMENTS:

Amend Claims 11, 12, 14, 15 and 26 to 29 as indicated in the following listing of the claims:

1. - 10. (*canceled*)
11. (*currently amended*) A method for the enzymatic production of terminally or subterminally hydroxylated fatty acids, which comprises
 - a) converting a fatty acid selected from terminally saturated, branched or unbranched fatty acids with 8 to 30 carbon atoms or a fatty acid derivative thereof, selected from C₁-C₄ alkyl esters, amides and anhydrides, in the presence of an electron donor system, a cytochrome P450 monooxygenase and oxygen wherein said electron donor system comprises an inorganic, non-electrode bound source of electrons and a mediator which is able to transfer electrons from the source of electrons to the enzyme, wherein said enzyme is a cytochrome P450-containing mono-oxygenase (E.C. 1.14) of the families CYP4, CYP52, CYP102, and wherein the source of electrons is a metal in powder form with a lower standard normal potential than the mediator; and
 - b) isolating the hydroxylated product(s).
12. (*currently amended*) A method as claimed in claim 11, ~~wherein the in~~ which an ω -hydroxylatable fatty acid ~~derivative is~~ selected from terminally saturated, branched ~~or~~ and unbranched C₁₀-C₃₀ fatty acids is employed in (a).
13. (*canceled*)
14. (*currently amended*) A method as claimed in claim 11, wherein the cytochrome P450 mono oxygenase has a modification in the amino acid sequence of SEQ ID NO:35, which modification consists of a single mutation wherein F87 is replaced by A or V, L188 is replaced by K, V26 is replaced by T, R47 is replaced by F, or V26 is replaced by T.
15. (*currently amended*) A method as claimed in claim 11, wherein the cytochrome P450 mono oxygenase has a modification in the amino acid sequence of SEQ ID NO:35, which modification consists of a mutation wherein F87 is replaced by A or V, and one further modi-

fication wherein L188 is replaced by K, A74 is replaced by G, R47 is replaced by F and V26 is replaced by T.

16. (previously presented) A method as claimed in claim 26, wherein the electron donor system is zinc/Co(III) sepulchrates.
17. (previously presented) A method as claimed in claim 11, wherein at least stage a) is carried out in the presence of chloride ions.
18. (previously presented) A method as claimed in claim 11, wherein at least stage a) is carried out in the presence of a hydrogen peroxide-cleaving enzyme.
19. - 22. (canceled)
23. (previously presented) A method as claimed in claim 11, wherein the mediator has a standard normal potential in the region of less than about -0.4 V.
24. (previously presented) A method as claimed in claim 11, wherein the mediator is selected from cobalt(III) sepulchrates, methylviologen, neutral red, riboflavin, ruthenium triacetate, FMN and FAD.
25. (previously presented) A method as claimed in claim 11, wherein the source of electrons is metallic zinc.
26. (currently amended) A method as claimed in claim 11, wherein the source of electrons is selected from the systems:
 - Zn/cobalt(III) sepulchrates and
 - Zn/neutral red.
27. (currently amended) A method as claimed in claim 12, ~~wherein the~~ in which an ω -hydroxylatable fatty acid ~~derivative is~~ selected from terminally saturated, branched ~~or~~ and unbranched C₁₂-C₃₀ fatty acids is employed in (a).
28. (currently amended) A method as claimed in claim 12, ~~wherein the~~ in which an ω -hydroxylatable fatty acid ~~derivative is~~ selected from terminally saturated, branched ~~or~~ and unbranched C₁₂-C₂₅ fatty acids is employed in (a).
29. (currently amended) A method as claimed in claim 12, ~~wherein the~~ in which an ω -hydroxylatable fatty acid ~~derivative is~~ selected from terminally saturated, branched ~~or~~ and unbranched C₁₂-C₂₀ fatty acids is employed in (a).

30. (*previously presented*) A method as claimed in claim 11, wherein the cytochrome P450 mono oxygenase is a mutant, which is obtained by amino acid substitution in at least one of positions 26, 47, 72, 74, 87, 188 and 354, of the wild-type enzyme (SEQ ID NO: 35).